

## **Iron Age Roads in Moab and Edom: The Archaeological Evidence**

With regard to research on ancient roads in the Near East, it is a commonly held opinion that paved interurban roads existed only from the Roman period onwards. For example, the entry for ancient roads in the Anchor Bible Dictionary (Beitzel 1991: 776) states that: “even a remnant of a paved road or highway connecting ancient Near East towns is practically unknown before the Roman era”. David Dorsey (1991: 28) in his book ‘The Roads and Highways of Ancient Israel’ wrote: “In sum, there is neither archaeological nor historical evidence for paved open roads in Iron Age Israel”. It is obvious that interurban roads did exist before the Roman Period. Egyptian, Mesopotamian and Biblical sources attest to this fact (Dorsey 1991: 1-51; Aharoni 1979: 43-63). However, what can we say about the physical character of these routes? As mentioned above, archaeological research has yet to produce evidence for the existence of pre-Roman roads.

We face here an exceptional scholarly challenge regarding this matter, because a map showing the peak of the Roman road system in the Roman provinces of Palestina and Arabia in the second-third centuries AD (Roll 1999) shows a network so dense that it may be assumed that it overlaid most of the ancient roads that passed along the same topographical tracks. For example, the ancient Iron Age roads from Rabbat Ammon (‘Ammān) to Dibbon (Dhībān), or from Shechem (Neapolis–Nablus) to Jerusalem were covered over by the Roman pavement.

Theoretically, we are searching for tracks that were in use during the period prior to Roman road construction, but which for some reason were not utilised during that period thereby leaving the ancient road undisturbed. It is obvious that in densely settled areas throughout the ages, and in modern times, it is difficult to identify the remains of built-

up ancient roads since their curb stones and pavements were often robbed and re-used in agricultural terracing or for building houses. Thus, in desert or fringe areas the chances of discovering ancient roads are much greater.

Since Moab and Edom were settled areas adjacent to the desert they make a unique field laboratory in which to inspect the physical remains of built-up roads which are earlier than the Roman period, particularly those dating to the Iron Age: the days of the kingdoms of Moab and Edom.

These new insights were gained completely by accident in the wake of field trips to Jordan and reading archaeological publications relating to Moab and Edom. Furnished with the well known aerial photograph of Nelson Glueck (1939: 112, 1940: 12, 1965: 200) of the ancient road that crosses Wādī al-Mūjib, we attempted to locate these impressive remains. Having failed to do so we initially assumed, like previous scholars, they had been covered by the modern asphalt road connecting Karak to Dibbon (Dhībān) and Mādabā.

However, on a field trip that was carried out after reading an article by Maxwell Miller (1989a) on the six al-Mudayna sites in Moab, we reached a view point on the western bank of Wādī an-Nukhayla: the southern branch of Wādī al-Mūjib not far from Mudaynat al-Mu‘arraja. From that point the ‘lost’ road of Glueck was clearly visible, in almost the same state of preservation as in the picture of the 1930s. Note, however, that its actual location is completely different to its anticipated location on the highway between the Karak plateau and the plateaus of Dibbon and Mādabā. Today, with the exceptional research tool of Google Earth, it is possible to pinpoint the exact location of the road: 31220575 N 35514476 E.

While standing above the observation point we



1. The ancient road ascending the eastern slope of Wādī Nukhayla.

were certain that such impressive road remains must have been mentioned in one of the publications on Moab. Having re-read everything written about the subject, we were surprised to find that this was not so. The extensive survey of the Karak plateau by Miller (1991) reached as far as the western bank of Wādī an-Nukhayla. Opposite, Parker's (1987, 2006) survey of the Limes area reached only as far as the eastern bank of the same wadi. So much so, that the wadi itself was left outside these important surveys.

Once we descended the slopes of the wadi and were able to observe the road remains at close quarters, we noticed that it is technically different from Roman roads, such as segments of the *Via Nova Triana* (Graf 1995; MacDonald 1996) or the roads from Moab to the Dead Sea like the ascents of Kathrabba (Mittman 1982) or Zoar (Ben David 2002).

Unlike Roman roads, the curb stones of Glueck's road, which from afar appear to be built into a wall, are actually arranged one near the other (FIG. 1). In the very steep upper part of the road, its originally

impressive width diminishes to the width of narrow camel's *naqeb*. Again, this phenomenon is not encountered along Roman roads as Roman engineers knew how to overcome steep slopes by construction, as can be seen very well in the Zoar (Zughar) ascent.

At the head of Glueck's road, just above the ascent, is a ruin that can be seen from far and wide. It is Site No. 57 in Parker's survey (Parker 2006: 60) and is known as Rujm al-'Abid by local bedouin (FIG. 2). The site is an elliptical structure, measuring 31 x 39m., built entirely of basalt with an outer wall constructed of two rows of well-laid blocks. On the western side of the enclosure there are remains of a large tower overlooking the cliff. According to the survey results most of the pottery collected at the site (61 out of a total of 94 sherds) dates to the Iron Age. In the words of the surveyors, "this was probably an Iron Age fort". More recently, during the 2006 field season of the Edom Lowlands Archaeological Project, a similar fort and enclosure dated to the Iron Age II period was discovered by Erez Ben Yosef (this volume), guarding an ancient Iron Age route in the vicinity of Khirbat an-Nuḥās, the major copper production area in the Iron Age.

These observations led us to propose that these remains do not belong to the Roman road system but to an earlier one, dated to the Iron-Age (Kloner and Ben David 2003). After this initial discovery we asked ourselves whether there might be any other tracks in this area of Moab that were in use in the Iron Age but were not subsequently overlaid by Roman construction.

### The Aroer Ascent

In the centre of the Moab plateau is the deep gorge of Wādī al-Mūjib — Biblical Arnon — which forms



2. The Iron Age fortification of Rujm al-'Abid.

a canyon ranging from 250 to 800m. in depth that leads eastward from the Dead Sea for about 40km. as the crow flies. In order to traverse the Moab plateau, one has to cross the Arnon. Only to the east, in the desert, can the deep gorge be bypassed, as is done by Darb al-Ḥaj, the Hejaz Railway and the modern Desert Highway from ‘Ammān to ‘Aqaba. However, this route is far from permanent Moabite settlements and from water sources. In the settled region of Moab, the Arnon could only have been crossed along the 3 to 4km. of its length that lie between the juncture of the tributary wadis of an-Nukhayla and Su‘ayda to the east and the impassable sandstone canyon to the west.

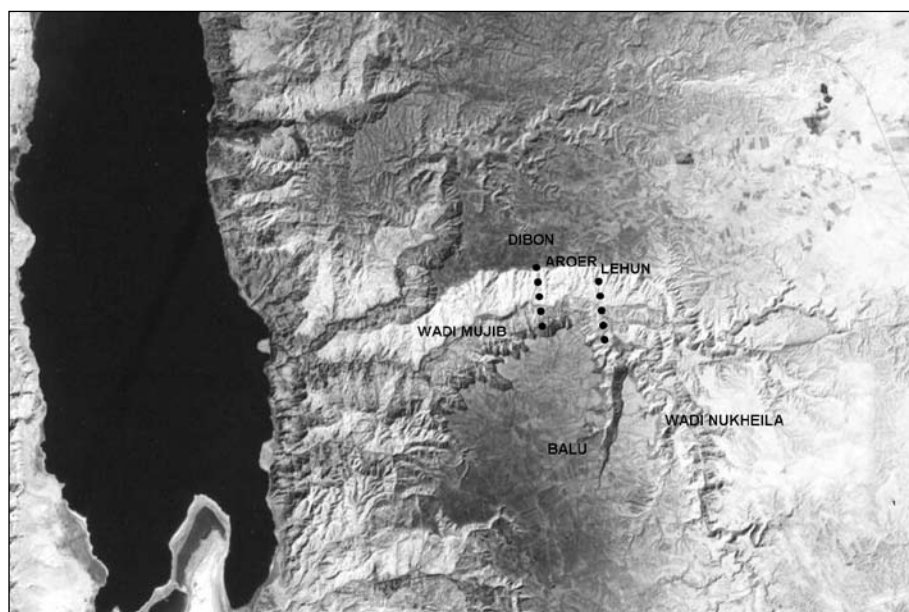
Three paths ascend the northern bank of the Arnon gorge in the narrow area that can potentially be crossed, and each of them has an Iron Age site at the top: Tall Dhibān on the route of the modern road, Aroer and al-Lāhūn (FIG. 3). The Roman road *Via Nova Traiana* crossed the Arnon not far from the modern Karak-Dhibān road. Travellers and scholars who passed through Moab in the nineteenth and early twentieth centuries described remains of the route (Kloner and Ben David 2003: 67-69).

Glueck (1940: 15) thought that the Roman road which crosses the Arnon had been built on top of an older road: the Biblical ‘King’s Highway’. Andrew Dearman (1989: 192, 1997: 206) maintains that the Biblical route crossed the Arnon farther east. In his opinion the road went from al-Bālū‘, about 3km. east of where the Roman road would later be built, towards Aroer or al-Lāhūn and not Dhibān. Other

scholars who have focused on Moab (Miller 1989b: 594; Olivier 1989: 174; Worschech 1990: 111-114; Mattingly 1996: 95) also argue in favour of an eastern route, suggesting that from al-Bālū‘ the road descended through Wādī al-Bālū‘ to the juncture of the wadis Nukhayla and Su‘ayda, from where it would have ascended to Aroer. Denyse Homes-Fredericq (1992: 200, 1997: 15), who excavated al-Lahūn, argues that the shortest route from al-Bālū‘ to the northern Moab plateau is through al-Lāhūn and that, she believes, was the path of the ancient road.

So, of the three potential tracks ascending the north bank of the Arnon, on which there are the Iron Age sites of Dibbon, Aroer and al-Lāhūn, the first, or Dibbon ascent, was overlaid by the Roman *Via Nova Triana* and the modern road. This would potentially have left the two other ascents undisturbed by Roman road builders. Searching for earlier descriptions of the two other tracks to al-Lahūn and Aroer, we found only a short description and drawing of Naqab Arar in Musil’s (1907: 329) book on Moab.

Descending from al-Lāhūn to the gorge of the al-Mūjib, one can see a good camel *naqab* without the remains of construction. In contrast, in Naqab Arar we found the remains of a wide road and, in some sections, curb stones. The lower part of the *naqab* is disturbed by modern agricultural fields and the first remains (FIG. 4) are to be seen at 7678 4842 UTM below a hill marked on some maps as triangulation point 432. The road is sometimes up to 6m. wide



3. The potential passage of Wādī al-Mūjib.



4. The lowest ancient remains of Naqab Arar.

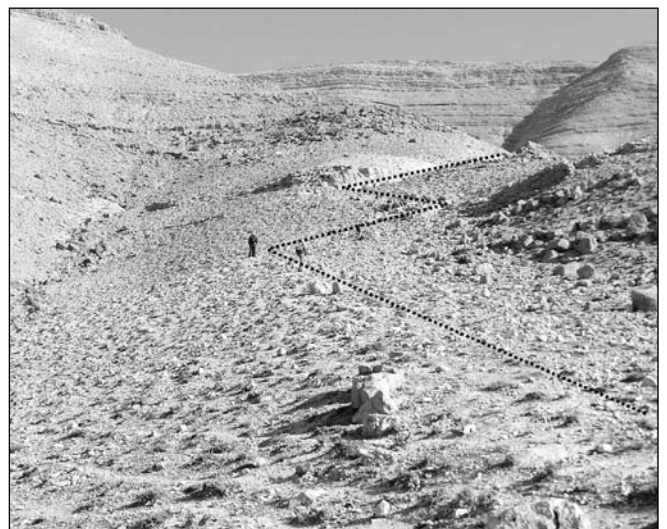
and clear sections of a few hundred meters can easily be seen from the upper parts of the *naqab* (FIGS. 5 and 6) and on Google Earth (31273904 N 35490100 E). In some places, constructed retaining walls are visible. Although these walls would not be needed for a regular camel *naqab*, they would have been necessary for a 4 to 6m. wide road. This wide road (FIG. 7) can be followed for about 1km. until it reaches the upper cliff, where its steep upper section narrows to a camel *naqab* (FIG. 8), just like Glueck's road. At the head of the ascent is the Biblical site of Aroer. According to the excavation reports (Olavarri 1965, 1969), this fortification



6. The lower wide section of Naqab Arar.



5. The wide sections of Naqab Arar as seen from the upper part of the *naqab*.



7. The upper wide section of Naqab Arar.



8. The narrow camel *naqab* in the upper part of Naqab Arar.

dates to the Iron Age but does not continue into the Roman period. These characteristics, and the certainty that the road crossed the Arnon further to the west (to Dibbon) in the Roman period, allow us to suggest that the remains in Naqab Arar date to the Iron Age.

Standing at the head of the Aroer ascent, it is impossible not to recall the inscription of Mesha from nearby Dibbon. In line 26 the Moabite king boasts, “I built Aroer”, followed by “I made the highway at the Arnon”. It would appear to be no accident that the two phrases are so close to each other, as already noted by Dearman (1989: 191-192).

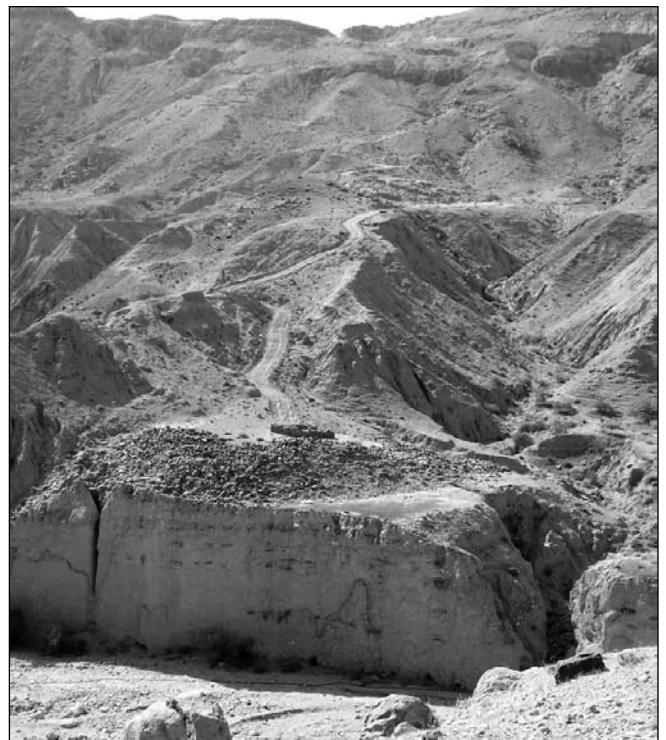
It is plausible to assume that this Iron Age track from Aroer, which descended Naqab Arar, crossed the Arnon and then ascended the Karak plateau via Wādī ash-Shuqafiyya to al-Bālū‘. As mentioned above, many scholars have suggested that this ancient route from Aroer to al-Bālū‘ was the ancient ‘King’s Highway’. Following Friedbert Ninow’s important survey and discoveries in Wādī ash-Shuqafiyya (Ninow 2002 and this volume), this suggestion seems much more solid.

There are two additional examples that need further examination, one from Edom and the other from north-west Moab.

### Naqab Dahal

Anyone who seeks to reach the ‘Araba from the mountain plateau of Edom must first negotiate the sandstone cliffs and then, in a very steep descent, the underlying layer of igneous rock. Most of the ancient routes from the mountains of Edom to the ‘Araba passed through natural gaps in order to

avoid steep descents of the Umm ‘Ishrin sandstone cliffs and igneous rock below. One of the larger gaps, where there is no cliff at all, in the ‘wall’ of the Edomite mountains is to be found in the limestone ridge south of Wādī al-Khanāşiri and north of Wādī Ḍānā. This path is known as Naqab Dahal (MacDonald 2006: 86) and was used by Lawrence of Arabia in his raid from Ṭafilah to Beer Sheba (Lawrence 1938: 501). Today a dirt road passes there, in many places built directly on top of the ancient route. Nevertheless, some sections of an ancient built road can still be seen along this natural route that connected Buşayra – Biblical Bosra, capital of Edom - and the ‘Araba. The best preserved section can be seen in the descent to Wādī Dahal (Google Earth 30451571 N 35295924 E). This ancient, constructed *naqab* reaches a fortified structure (FIG. 9) just above the wadi (Google Earth 30452785 N 3529392441 E) and seems not to have been mentioned in previous surveys. The few pottery sherds observed at this site seem to belong to the Iron Age and not to the Nabataean or Roman periods. This important Iron Age route between Bosra and the Iron Age site at ‘Ayn Hasiva (Cohen and Israel 1995), identified with Biblical Tamar, has recently been researched by Erez Ben Yosef as part of a regional survey of road systems in the area of Faynān.



9. The fortified structure on Naqab Dahal



### The Zarqā' Mā'in Crossing

A well-built ancient road running in a north-south direction to the east of the Dead Sea has been known since the PEF survey in Eastern Palestine (Conder 1889). The best-preserved remains are to be found on the banks of Wādī Zarqā' Mā'in, east of the famous hot springs at Hammamāt Mā'in. The PEF surveyors suggested that this road led from Livias to Machaerus (Conder 1889: 193) but August Stobel's (1981, 1990, 1997) explorations in this area showed that it did not lead to Machaerus but to Khirbat 'Aṭarūz, the site of Biblical Atarot. A fortified site called Būz al-Mushallah (Strobel 1990: 83-85; Strobel and Wimmer 2003: 84-88) was discovered above the crossing of the Wādī Zarqā' Mā'in gorge, adjacent to the ancient road (FIG. 10). Following archaeological excavation, the site was dated to the Iron Age and was tentatively identified with Biblical Zereth-shahar (Wimmer 2000a, 2000b). The fact that the ancient built road did not lead to the Hellenistic-Roman site of Machaerus but to the Iron Age site of Khirbat 'Aṭarūz suggests that it too might date to the Iron Age period. The late Prof. Stobel was certain that, at the very least, the section of road that passes the Būz al-Mushallah Iron Age fortress is of Iron Age date as well, notwithstanding its amazingly well-preserved state (Stefan Wimmer pers. comm.).

As noted above, ancient roads tend to be restorations of older routes. Thus, Roman roads were built on earlier roads. This is the reason why it is so difficult to prove the existence and use of wide roads in pre-Roman periods. The roads discussed in this paper are rare examples of ancient roads that do not seem to have been rebuilt in the Roman period. In



10. The ancient road below the Iron Age site of Būz al-Mushallah.

other words, they represent Iron Age road-building technology and, because there was apparently no significant need, they were not rebuilt by the Nabataeans or Romans.

Moab and Edom are a unique field laboratory in which to examine the physical remains of built-up roads which pre-date the Roman period, so hopefully more discoveries are to come.

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